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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,756	11/20/2003	Warren Thomas Johnson	USFMCR.3C1C1	1448

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EXAMINER
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MENON, KRISHNAN S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/718,756	Applicant(s) JOHNSON ET AL	
	Examiner Krishnan S. Menon	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7 and 34-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 34-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-4, 7 and 34-45 are pending after the amendment of 12/16/05

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 7 and 34-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopf (US 6,017,451) in view of Janik (US 6,048,454).

Claim 1: Kopf teaches a manifold (see figure 1,2) comprising a housing (260) with four connecting collars (200), filter submodules (84) having hollow fiber bundles (column 7 lines 19-28), and a clip (or clamp) for releasably securing the submodules to the collars as claimed (see column 5 lines 18-28: conventional clamps). The instant claims differ from the teaching of the reference in the details of the clip. However, the conventional "C" clamp meets the limitations recited for the clip, and one of ordinary skill in the art would use a conventional C clamp for securing the submodules to the collar as taught by the reference for quick and easy assembly and disassembly. Such a conventional clamp is taught by the reference Janik – see figure 9, it has a circumferential split, flanges that engage with the flanges of the collar, the longitudinal projection (looks like a T, whose length can be adjusted with a screw), and is a snap-fit.

Claim 2: housing 260 is in fluid communication with the collar

Claim 3: collar has internal stepped seat – see the O ring groove in figure 2

Claim 4: radially outwardly directed circumferential flanges – see figure 2

Claim 7: corresponding radially inwardly directed flange with step to engage with the collar – the submodule has similar mating flange.

Claim 34: four submodules – see figure 2

Claim 35: collars in common plane. Re parallel axis, the figure 2 has .  
perpendicular axis for the collars, but they could as well be parallel axis by having the collars arranged at the end of the elbows at location 230, for instance. See this with respect to the assembly in figure 1. A mere ... rearrangement of parts (In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) is unpatentable.

Claim 36 has limitations of claim 1 with plurality of submodules – see figures.

Claim 37: clip connection by snap – fit: see rejection of claim 1.

Claim 38: second connecting sleeves at opposite end of the hollow fiber submodule – see figure 1.

Claim 39: second housing, etc – see figure 1

Claim 40, 41, 42: filtrate and cleaning conduits fluidly connected: conduits can be seen fluidly connected to the housing in figure 1, which could be used for filtrate and cleaning solutions (90, 92, 102, etc). Filtrate and cleaning connections are functional language or intended use, and are not patentable limitations. Re positioning cleaning solution conduit between two pairs of second collars, see figure 1, line 102. This conduit is between two “second” collars – collars at the bottom. “Cleaning solution” is

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functional language, and one could use the conduit 102 for pumping in cleaning solution.

Claim 43: Modules are upright – see figure 1

Claim 44: first collar to the first housing – see figure 1

Claim 45: open feed tank: the references do not teach any open feed tank.

However, such use of feed tanks is commonly known, and it would be obvious to one of ordinary skill in the art at the time of invention that a feed tank may be necessary to supply the fluid to be processed in the filter system as shown in figure 1 of Kopf.

Claim 46: fluid tight cap – see top 62 are the corresponding bottom part in figure 1.

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan S. Menon  
Patent Examiner  
1/10/06

  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
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